SONY

TFT LCD Color Computer Display

SDM-HX73
SDM-HX93

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Owner's Record

The model and serial numbers are located at the rear of the unit. Record these numbers in the spaces provided below. Refer to them whenever you call upon your dealer regarding this product.
Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

IMPORTANTE

Para prevenir cualquier mal funcionamiento y evitar daños, por favor, lea detalladamente este manual de instrucciones antes de conectar y operar este equipo.

If you have any questions about this product, you may call:
Sony Customer Information Center
1-800-222-SONY (7669)
or write to:
Sony Customer Information Center
1 Sony Drive, Mail Drop #T1-11, Park Ridge, NJ 07656

Declaration of Conformity

Trade Name:	SONY
Model No.:	SDM-HX73/HX93
Responsible Party:	Sony Electronics Inc.
Address:	680 Kinderkamack Road,Oradell,NJ 07649 USA
Telephone No.:	201-930-6972

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

BZ03

NOTICE

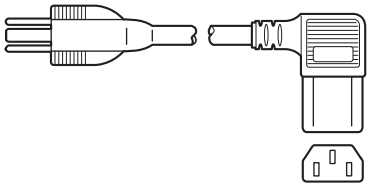
This notice is applicable for USA/Canada only.
If shipped to USA/Canada, install only a UL LISTED/CSA LABELLED power supply cord meeting the following specifications:
SPECIFICATIONS

Plug Type	Nema-Plug 5-15p
Cord	Type SVT or SJT, minimum 3 × 18 AWG
Length	Maximum 15 feet
Rating	Minimum 7 A, 125 V

NOTICE

Cette notice s'applique aux Etats-Unis et au Canada uniquement.
Si cet appareil est export* aux Etats-Unis ou au Canada, utiliser le cordon d'alimentation portant la mention UL LISTED/CSA LABELLED et remplissant les conditions suivantes:
SPECIFICATIONS

Type de fiche	Fiche Nema 5-15 broches
Cordon	Type SVT ou SJT, minimum 3 × 18 AWG
Longueur	Maximum 15 pieds
Tension	Minimum 7 A, 125 V



As an ENERGY STAR Partner, Sony Corporation has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

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- IBM PC/AT and VGA are registered trademarks of IBM Corporation of the U.S.A.
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- WOW technology is incorporated under license from SRS Labs, Inc.
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- Furthermore, "™" and "®" are not mentioned in each case in this manual.

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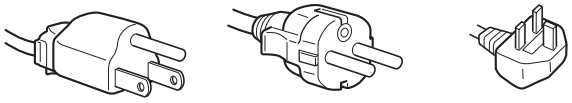
GB

Precautions

Warning on power connections

- Use the supplied power cord. If you use a different power cord, be sure that it is compatible with your local power supply.
  For the customers in the U.S.A.
  If you do not use the appropriate cord, this monitor will not conform to mandatory FCC standards.
  For the customers in the UK
  If you use the monitor in the UK, be sure to use the appropriate UK power cord.

Example of plug types



for 100 to 120 V AC | for 200 to 240 V AC | for 240 V AC only

The equipment should be installed near an easily accessible outlet.

Installation

Do not install or leave the monitor:

- In places subject to extreme temperatures, for example near a radiator, heating vent, or in direct sunlight. Subjecting the monitor to extreme temperatures, such as in an automobile parked in direct sunlight or near a heating vent, could cause deformations of the casing or malfunctions.
- In places subject to mechanical vibration or shock.
- Near any equipment that generates a strong magnetic field, such as a TV or various other household appliances.
- In places subject to inordinate amounts of dust, dirt, or sand, for example near an open window or an outdoor exit. If setting up temporarily in an outdoor environment, be sure to take adequate precautions against airborne dust and dirt. Otherwise irreparable malfunctions could occur.

Handling the LCD screen

- Do not leave the LCD screen facing the sun as it can damage the LCD screen. Take care when you place the monitor by a window.
- Do not push on or scratch the LCD screen. Do not place a heavy object on the LCD screen. This may cause the screen to lose uniformity or cause LCD panel malfunctions.
- If the monitor is used in a cold place, a residual image may appear on the screen. This is not a malfunction. The screen returns to normal as the temperature rises to a normal operating level.
- If a still picture is displayed for a long time, a residual image may appear for a while. The residual image will eventually disappear.
- The LCD panel becomes warm during operation. This is not a malfunction.

About the built-in stereo speakers

Be sure to keep magnetic recording equipment, tapes, and floppy discs away from the speaker's opening as the speakers generate a magnetic field. This magnetic field may affect data stored on magnetic tapes and discs.

Note on the LCD (Liquid Crystal Display)

Please note that the LCD screen is made with high-precision technology. However, black points or bright points of light (red, blue, or green) may appear constantly on the LCD screen, and irregular colored stripes or brightness may appear on the LCD screen. This is not malfunction.
(Effective dots: more than 99.99%)

Maintenance

- Be sure to unplug the power cord from the power outlet before cleaning your monitor.
- Clean the LCD screen with a soft cloth. If you use a glass cleaning liquid, do not use any type of cleaner containing an anti-static solution or similar additive as this may scratch the LCD screen's coating.
- Clean the cabinet, panel, and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint pen or screwdriver. This type of contact may result in a scratched picture tube.
- Note that material deterioration or LCD screen coating degradation may occur if the monitor is exposed to volatile solvents such as insecticide, or if prolonged contact is maintained with rubber or vinyl materials.

Transportation

- Disconnect all cables from the monitor, and grasp both side of the LCD display firmly taking care not to scratch the screen when transporting. If you drop the monitor, you may be injured or the monitor may be damaged.
- When you transport this monitor for repair or shipment, use the original carton and packing materials.

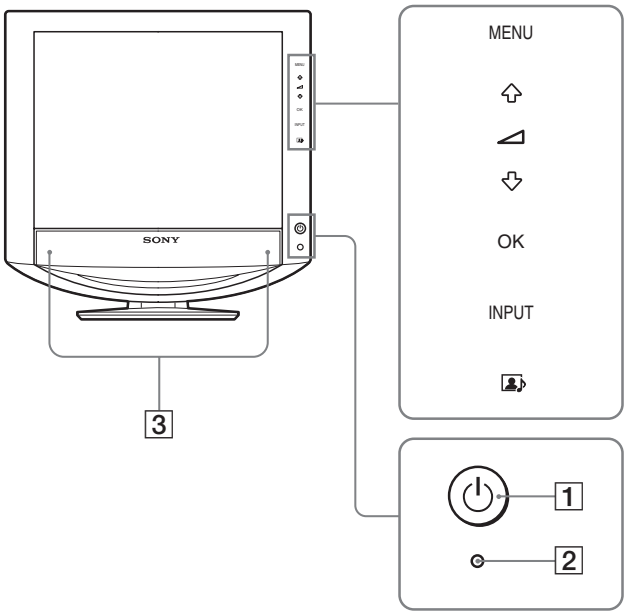
Disposal of the monitor

- **Do not dispose of this monitor with general household waste.**
- **The fluorescent tube used in this monitor contains mercury. Disposal of this monitor must be carried out in accordance to the regulations of your local sanitation authority.**

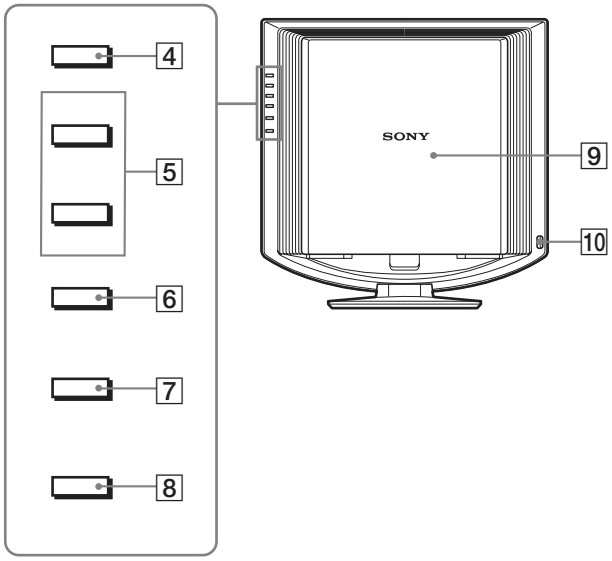
Identifying parts and controls

See the pages in parentheses for further details.

Front of the LCD display



Side view of the LCD display



1 ⏻ (Power) switch and ⏻ (power) indicator (pages 9, 19, 24)
To turn the display on or off, press the ⏻ (power) switch. The power indicator lights up in green when the display is turned on, and lights up in orange when the display is in the power saving mode.

2 Light sensor (page 20)
This sensor measures the brightness of the surrounding area. Be sure not to cover the sensor with papers, etc.

3 Stereo speakers (page 19)
These speakers output the audio signals as sound.

4 MENU button (page 12)
This button turns the menu screen on and off.

5 ↓/↑ and ◿ (volume control) buttons (pages 12, 19)
These buttons are used to select the menu items and make adjustments, and also display the "Volume" menu to control the volume.

6 OK button (page 12)
This button activates the selected menu item and adjustments made using the ↓/↑ buttons (5).

7 INPUT button (page 11)
This button switches the video input signal between INPUT1, INPUT2 and INPUT3 when two computers are connected to the monitor.

8 button (page 20)
This button changes the MODE (PICTURE/AUDIO).

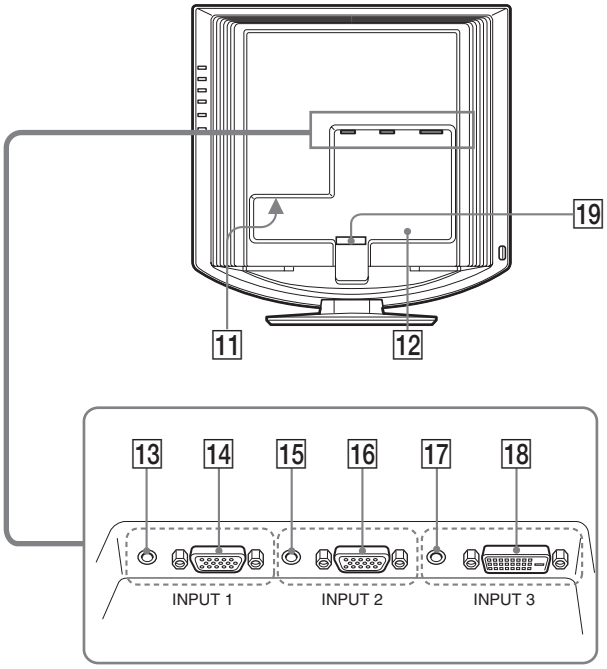
9 Back cover (page 7)
Slide up this cover when you connect cables or cords.

10 Headphones jack (page 19)
This jack outputs audio signals to the headphones.

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(continued)

Rear of the LCD display



11 AC IN connector (page 8)
This connector connects the power cord (supplied).

12 Security Lock Hole
The security lock hole should be used with the Kensington Micro Saver Security System.
Micro Saver Security System is a trademark of Kensington.

13 Audio input jack for INPUT1 (page 8)
This jack inputs audio signals when connected to the audio output jack of a computer or other audio equipment connected to INPUT1.

14 HD15 input connector (analog RGB) for INPUT1 (page 7)
This connector inputs analog RGB video signals (0.700 Vp-p, positive) and sync signals.

15 Audio input jack for INPUT2 (page 8)
This jack inputs audio signals when connected to the audio output jack of a computer or other audio equipment connected to INPUT2.

16 HD15 input connector (analog RGB) for INPUT2 (page 7)
This connector inputs analog RGB video signals (0.700 Vp-p, positive) and sync signals.

17 Audio input jack for INPUT3 (page 8)
This jack inputs audio signals when connected to the audio output jack of a computer or other audio equipment connected to INPUT3.

18 DVI-D input connector (digital RGB) for INPUT3 (page 7)
This connector inputs digital RGB video signals that comply with DVI Rev.1.0.

19 Cable holder (page 9)
This part secures cables and cords to the monitor.

Setup

Before using your monitor, check that the following items are included in your carton:

- LCD display
- Power cord
- HD15-HD15 video signal cable (analog RGB)
- DVI-D video signal cable (digital RGB)
- Audio cord (stereo miniplug)
- CD-ROM (utility software for Windows/Macintosh, Operating Instructions, etc)
- Warranty card
- Quick Setup Guide

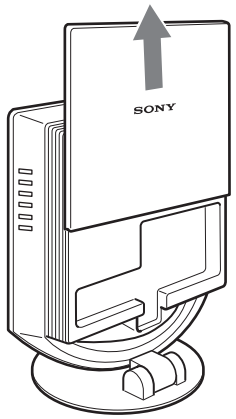
Setup 1: Connect the video signal cables

- **Turn off the monitor and computer before connecting them.**
- **When connecting the computer to the monitor's HD15 input connector (analog RGB), refer to "Connect a computer equipped with an HD15 output connector (analog RGB)."**

Note

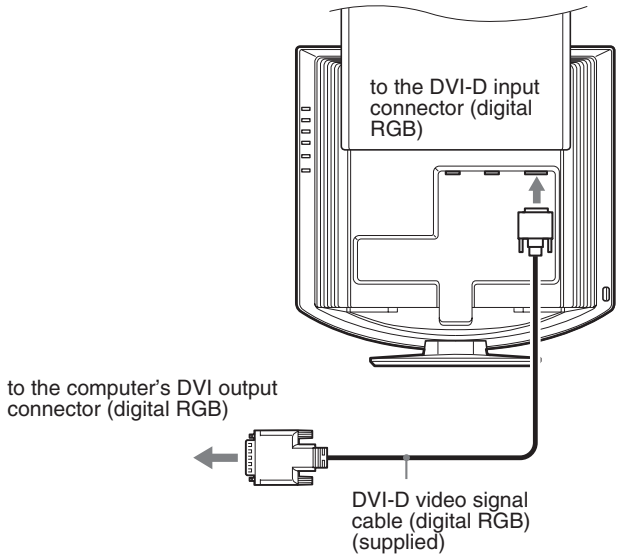
Do not touch the pins of the video signal cable connector as this might bend the pins.

Slide up the back cover.



Connect a computer equipped with a DVI output connector (digital RGB)

Using the supplied DVI-D video signal cable (digital RGB), connect the computer to the monitor's DVI-D input connector (digital RGB) for INPUT3.



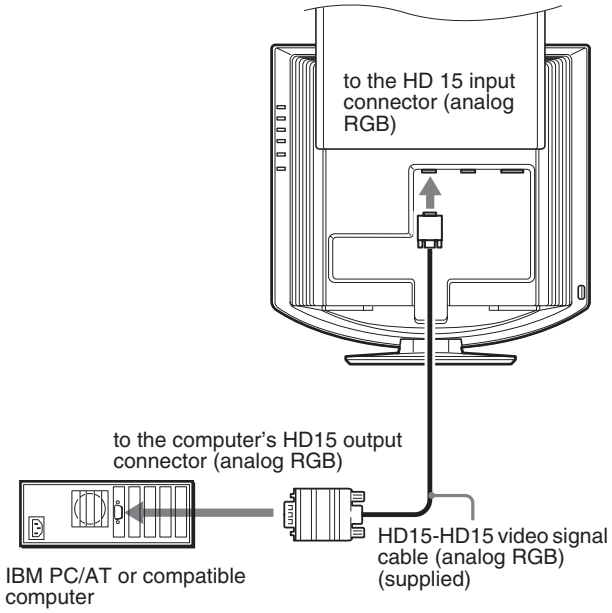
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Connect a computer equipped with an HD15 output connector (analog RGB)

Using the supplied HD15-HD15 video signal cable (analog RGB), connect the computer to the monitor's HD 15 input connector (analog RGB) for INPUT1 or INPUT2.

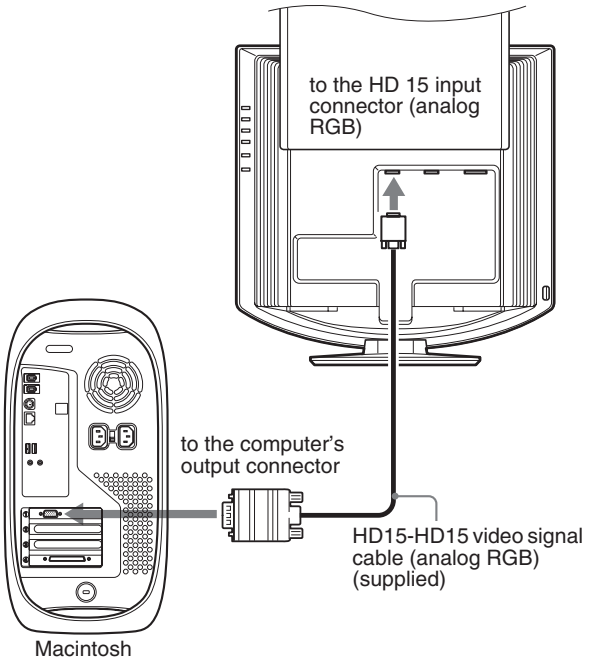
Connect the computer according to the following illustrations.

■ Connecting to an IBM PC/AT or compatible computer



(continued)

■ Connecting to a Macintosh



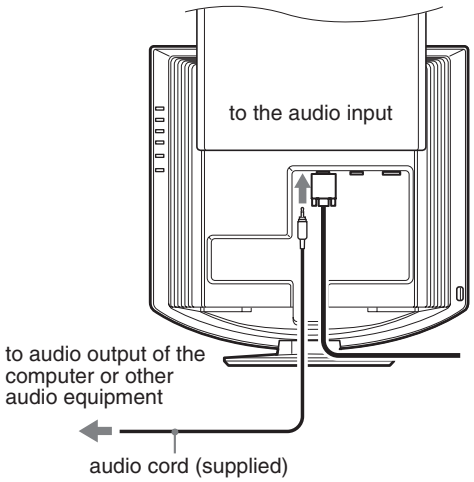
When connecting a Macintosh computer, use an adapter (not supplied), if necessary. Connect the adapter to the computer before connecting the video signal cable.

Setup 2: Connect the audio cord

Connect the supplied audio cord to the monitor's corresponding audio input jack.

Using the monitor's speakers or headphones, you can listen to sound from your computer or other audio equipment connected to the monitor's audio input jacks.

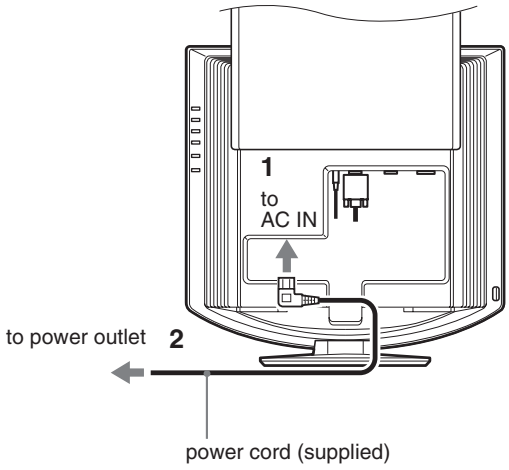
For more information, see "Controlling the volume" on page 19.



Setup 3: Connect the power cord

1 Connect the supplied power cord securely to the monitor's AC IN connector.

2 Connect the other end securely to a power outlet.

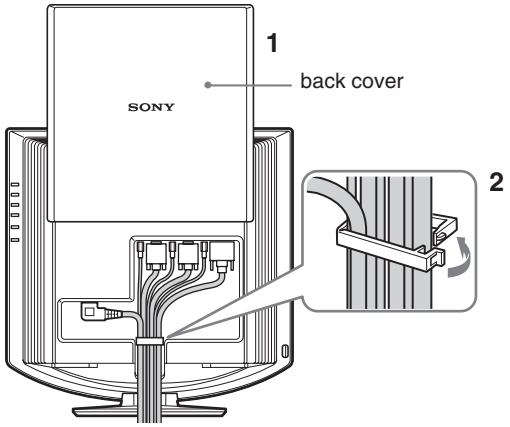


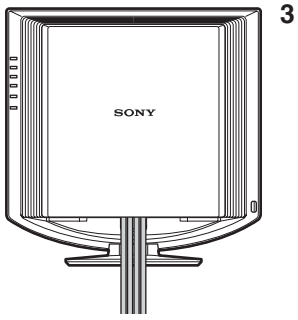
Setup 4: Bundle the cords and cables

1 Slide up the back cover.

2 Secure the video signal cable, audio cords and the power cord using the cable holder on the cabinet.

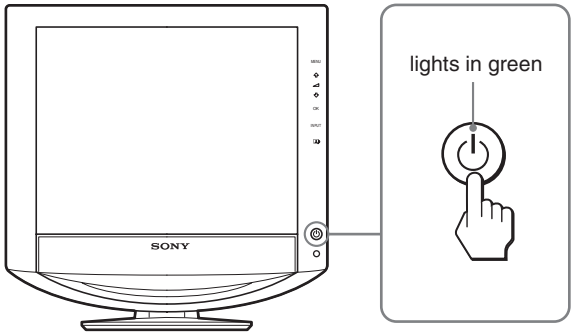
3 Slide down the back cover.





Setup 5: Turn on the monitor and computer

1 Press the ⏻ (power) switch on the front of the monitor.
The ⏻ (power) indicator lights up in green.



2 Turn on the computer.

3 Press the INPUT button to select the desired input signal.
The selected input's picture appears on the screen.
For more information, see "Selecting the input signal (INPUT button)" on page 11.



The installation of your monitor is complete. If necessary, use the monitor's controls to adjust the picture (page 12).

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(continued)

If no picture appears on your screen

- Check that the power cord and the video signal cable are properly connected.
- If “NO INPUT SIGNAL” appears on the screen:
  – The computer is in the power saving mode. Try pressing any key on the keyboard or moving the mouse.
  – Check that the input signal setting is correct by pressing the INPUT button (page 11).
- If “CABLE DISCONNECTED” appears on the screen:
  – Check that the video signal cable is properly connected.
  – Check that the input signal setting is correct by pressing the INPUT button (page 11).
- If “OUT OF RANGE” appears on the screen, reconnect the old monitor. Then adjust the computer’s graphics board within the following ranges.

	Analog RGB	Digital RGB
Horizontal frequency	28–80 kHz	28–64 kHz
Vertical frequency	48–75 Hz	60 Hz
Resolution	1280 × 1024 or less	1280 × 1024 or less

For more information about on-screen messages, see “Trouble symptoms and remedies” on page 22.

No need for specific drivers

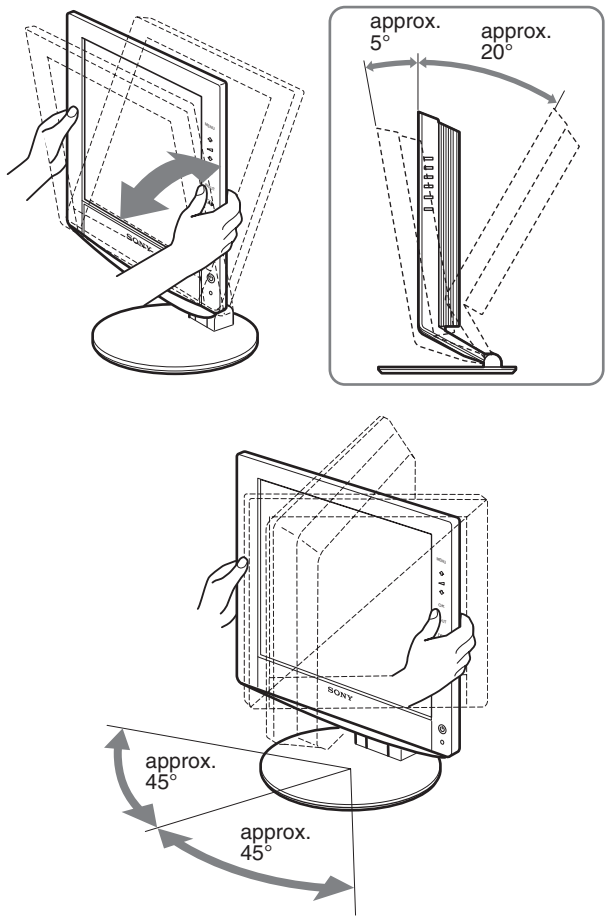
The monitor complies with the “DDC” Plug & Play standard and automatically detects all the monitor’s information. No specific driver needs to be installed on the computer.
The first time you turn on your computer after connecting the monitor, the setup Wizard may appear on the screen. In this case, follow the on-screen instructions. The Plug & Play monitor is automatically selected so that you can use this monitor.

The vertical frequency is set to 60 Hz.
Since flickers are unobtrusive on the monitor, you can use it as it is. You do not need to set the vertical frequency to any particular high value.

Setup 6: Adjust the tilt and swivel

This monitor can be adjusted within the angles shown below.

Grasp the sides of the LCD panel, then adjust screen angles.



To use the monitor comfortably

Adjust the viewing angle of your monitor according to the height of your desk and chair, and so that light is not reflected from the screen to your eyes.

Note

When adjusting the screen tilt and height, proceed slowly and carefully, being sure not to hit the monitor against the desk.

Selecting the input signal
(INPUT button)

Press the INPUT button.
The input signal change each time you press this button.



On-screen message (Appears about 5 seconds on the upper left corner.)	Input signal configuration
INPUT1: HD15	HD15 input connector (analog RGB) for INPUT1
INPUT2 : HD15	HD15 input connector (analog RGB) for INPUT2
INPUT3 : DVI-D	DVI-D input connector (digital RGB) for INPUT3

Customizing Your Monitor

Before making adjustments

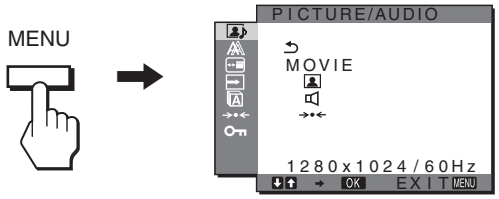
Connect the monitor and the computer, and turn them on. For the best results, wait for at least 30 minutes before making adjustments.

You can make numerous adjustments to your monitor using the on-screen menu.

Navigating the menu

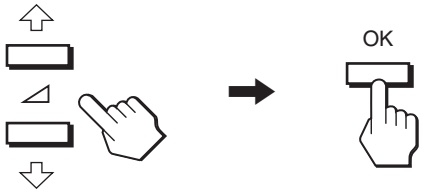
1 Display the main menu.

Press the MENU button to display the main menu on your screen.



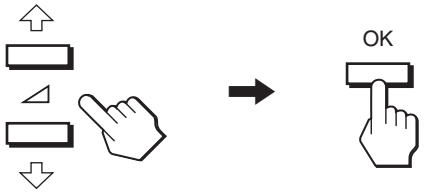
2 Select the menu.

Press the ↓/↑ buttons to display the desired menu. Press the OK button to move to the first menu item.



3 Select the item you want to adjust.

Press the ↓/↑ buttons to select the item you want to adjust, then press the OK button.



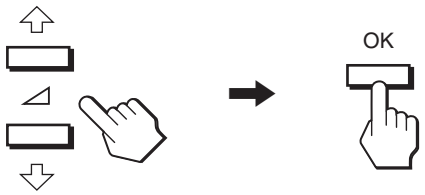
If ⮌ is one of the menu items.

When you select ⮌ and press the OK button, the display returns to the previous menu.

4 Adjust the item.

Press the ↓/↑ buttons to make the adjustment, then press the OK button.

When you press the OK button, the setting is stored, then the display returns to the previous menu.



5 Close the menu.

Press the MENU button once to return to normal viewing. If no buttons are pressed, the menu closes automatically after about 45 seconds.



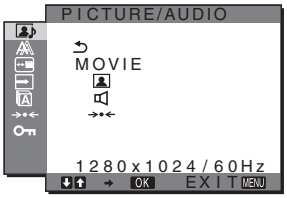
■ Resetting the adjustments to the default settings

You can reset the adjustments using RESET menu. For more information about resetting the adjustments, see ↠ (RESET) on page 18.

PICTURE/AUDIO menu

You can adjust the following items using PICTURE/AUDIO menu.

- MODE (GAME/MOVIE/PC/AUTO)
- PICTURE
- AUDIO
- MODE RESET



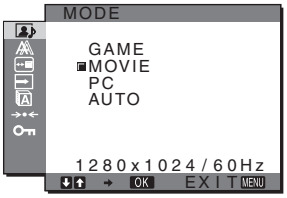
■ MODE menu

You can select the appropriate screen brightness for your purpose. The PICTURE/AUDIO settings can be set for each mode. The changed setting is automatically applied for each input (INPUT1/INPUT2/INPUT3).

1 Press the MENU button.
The main menu appears on the screen.

2 Press the ↓/↑ button to select (PICTURE/AUDIO) and press the OK button.
The PICTURE/AUDIO menu appears on the screen.

3 Press the ↓/↑ button to select "MOVIE" and press the OK button.
The MODE menu appears on the screen.



4 Press the ↓/↑ button to select the desired mode and press the OK button.
The default setting is MOVIE.

- GAME: Bright picture.
- MOVIE: Clear picture with strong contrast.
- PC: Soft tone picture.
- AUTO: Automatically adjusts the screen brightness according to the brightness of the surroundings (automatic brightness adjustment function). For more information, see "Automatic brightness adjustment function (light sensor)" (page 20).

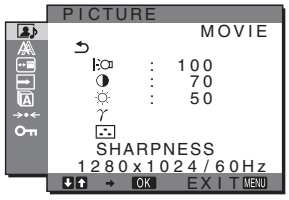
NOTE

In the AUTO mode, you cannot adjust the backlight.

■ PICTURE menu

You can adjust the following items using the PICTURE menu.

- BACKLIGHT
- CONTRAST ◑
- BRIGHTNESS
- GAMMA menu
- COLOR menu
- SHARPNESS



Adjusting the BACKLIGHT

If the screen is too bright, adjust the backlight to make the screen easier to see.

1 Press the MENU button.
The main menu appears on the screen.

2 Press the ↓/↑ button to select (PICTURE/AUDIO) and press the OK button.
The PICTURE/AUDIO menu appears on the screen.

3 Press the ↓/↑ buttons to select (PICTURE) and press the OK button.
The PICTURE menu appears on the screen.

4 Press the ↓/↑ buttons to select " BACKLIGHT" and press the OK button.
The "BACKLIGHT" menu appears on the screen.

5 Press the ↓/↑ buttons to adjust the light level and press the OK button.

Adjusting the CONTRAST ◑

Adjust the picture contrast.

1 Press the MENU button.
The main menu appears on the screen.

2 Press the ↓/↑ button to select (PICTURE/AUDIO) and press the OK button.
The PICTURE/AUDIO menu appears on the screen.

3 Press the ↓/↑ buttons to select (PICTURE) and press the OK button.
The PICTURE menu appears on the screen.

4 Press the ↓/↑ buttons to select "◑ CONTRAST" and press the OK button.
The "CONTRAST" menu appears on the screen.

5 Press the ↓/↑ buttons to adjust the contrast and press the OK button.

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